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The Clustering and Contagion of Suicide

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Abstract

Two general types of suicide cluster have been discussed in the literature; roughly, these can be classified as mass clusters and point clusters. Mass clusters are media related, and the evidence for them is equivocal; point clusters are local phenomena, and these do appear to occur. Contagion has not been conceptually well developed nor empirically well supported as an explanation for suicide clusters. An alternative explanation for why suicides sometimes cluster is articulated: People who are vulnerable to suicide may cluster well before the occurrence of any overt suicidal stimulus, and when they experience severe negative events, including but not limited to the suicidal behavior of one member of the cluster, all members of the cluster are at increased risk for suicidality (a risk that may be offset by good social support).

Keywords

suicide clusters; suicide contagion

The phenomena of attempted and completed suicide are troubling and mysterious enough in themselves; the possibility that suicide is socially contagious, even more so. This article considers whether suicide clusters exist, and if so, whether "contagion" processes can account for them.

There is a potentially important distinction between the terms suicide cluster and suicide contagion. A cluster refers to the factual occurrence of two or more completed or attempted suicides that are nonrandomly "bunched" in space or time (e.g., a series of suicide attempts in the same high school or a series of completed suicides in response to the suicide of a celebrity). The term cluster implies nothing about *why* the cluster came to be, only *that* it came to be. By contrast, contagion refers to a possible explanation (as I argue later, a fairly vague explanation) of *why* a cluster developed. Clusters (of a sort) appear to occur, but the status of contagion as the reason for such occurrences is more equivocal.

CLUSTERS—OF A SORT—APPEAR TO OCCUR

Given that attempted and completed suicides are relatively rare, and given that they tend to be more or less evenly distributed in space and time (e.g., suicides occur at roughly the same rate in various regions of the United States and occur at roughly the same rate regardless of the day of the week or the month), it is statistically unlikely that suicides would cluster by chance alone. Yet cluster they do, at least under some circumstances. (Such clustering is often termed the "Werther effect," after a fictional character of Goethe's whose suicide purportedly inspired actual suicides in 18th-century Europe.) Two general types of suicide cluster have been discussed in the literature: mass clusters and point clusters. Mass clusters are media related; point clusters, local.

Point Clusters

Point clusters occur locally, involving victims who are relatively contiguous in both space and time. The prototypical setting is institutional (i.e., a school or a hospital). Probably the best documented example was reported by Brent and his colleagues (Brent, Kerr, Goldstein, & Bozigar, 1989). In a high school of approximately 1,500 students, 2 students committed suicide within 4 days. During an 18-day span that included the 2 completed suicides, 7 other students attempted suicide and an additional 23 reported having suicidal thoughts. It is important to note, though, that Brent and his colleagues found that 75% of the members of the cluster had at least one major psychiatric disorder, which had existed before the students' exposure to the suicides (i.e., they were vulnerable to begin with). Also, victims' close friends appeared to develop suicidal symptoms more readily than students who were less close to victims. In other words, social contiguity was an important factor.

Haw (1994) described a point cluster of 14 suicides within a 1-year period among patients of a London psychiatric unit. Thirteen of the 14 patients suffered from severe, chronic mental illness (e.g., schizophrenia), and most had ongoing therapeutic contact with the psychiatric unit. The author reported that the point cluster's occurrence may have stemmed from patients' valid perceptions that the future of the hospital was uncertain and that their access to medical staff was decreasing and ultimately threatened. Several other point clusters have also been described (see, e.g., Gould, Wallenstein, & Davidson, 1989).

When Point Clusters Do Not Occur

Given that suicidality runs in families, and that the suicide of a family member is an enormously traumatic event, one might imagine that point clusters would be particularly likely within a given family (e.g., the suicide of one family member might be followed closely by the suicide of another family member). However, within-family point clusters appear to be very rare. (Although certainly at least one has occurred, I could find no documented case in the literature. It is possible, however, that they are underreported or underpublicized.) Point clusters also appear not to occur within groupings beyond the institutional (e.g., at the level of a large community; cf. Chiu, 1988)—except, that is, in the (possible) case of mass clusters.

Mass Clusters

Unlike point clusters, mass clusters are media-related phenomena. They are grouped more in time than in space, and are purportedly in response to the publicizing of actual or fictional suicides. Phillips and his colleagues have examined the possible relation of suicide-related media events and the rate of subsequent suicides (see, e.g., Phillips & Carstensen, 1986, 1988). These researchers have argued that the suicide rate in the population increases in the days after descriptions of suicides appear in televised news reports and in newspapers. Indeed, in many of these studies, the suicide rate did appear to rise after a publicized suicide, although the effect did not always occur, and it appeared to be primarily applicable to adolescent suicide. Interestingly, these researchers also found that accidents, such as motor vehicle fatalities, may increase in the days following a publicized suicide, apparently because many such accidents are actually intentional suicides.

However, a study by Kessler, Downey, Milavsky, and Stipp (1988) cast doubt on the conclusion that mass clusters exist. Examining adolescent suicides from 1973 to 1984, the authors found no reliable relation between suicide-related newscasts and the subsequent adolescent suicide rate. Similarly, these researchers obtained no evidence that the number of teenagers viewing the newscasts (as determined by Neilsen ratings) was correlated with the number of adolescent suicides.

In the case of fictional portrayals of suicide (e.g., a television movie in which a character commits suicide), the evidence indicates, at most, a weak effect. Schmidtke and Haefner (1988) studied responses to a serial, broadcast twice in Germany, showing the railway suicide of a young man. After each broadcast, according to these researchers, railway suicides among young men (but not among other groups) increased sharply. However, several other researchers have conducted similar studies and concluded that there was no relation between fictionalized accounts of suicide and the subsequent suicide rate, for adolescents in particular (Phillips & Paight, 1987; Simkin, Hawton, Whitehead, & Fagg, 1995), as well as for people in general (Berman, 1988).

CLUSTERING DOES NOT CONTAGION MAKE

If suicide clusters exist (and it appears that point clusters do, although mass clusters may not), contagion—the social, or interpersonal, transmission of suicidality from one victim to another—may or may not be involved. With regard to an array of unfortunate events (e.g., disasters, accidents, even illnesses), it is easy to imagine that there would be point clusters of victims without contagion of any sort. For example, the victims of the Chernobyl nuclear disaster were

point-clustered, not because of any type of contagion between victims, but because of victims' simultaneous exposure to radiation. Even cases of mass suicide, the victims of which are point-clustered, are best viewed as instances of mass delusion (e.g., Heaven's Gate) or of a combination of delusion and coercion (e.g., Jonestown), rather than of contagion. In cases such as Chernobyl and even Jonestown, the point-clustering of victims may be seen as due to the simultaneous effects of some pernicious, external influence, such as radiation, on a preexisting, socially contiguous group of people, such as those working at or living near the Chernobyl plant.

In disease, the agent of contagion (e.g., some microbial pathogen) is specified, and its mechanism of action delineated. By contrast, no persuasive agent or mechanism of suicide contagion has been articulated. Indeed, with one exception, the very definition of suicide contagion has been so vague as to defy analysis. The one exception is behavioral imitation, which, although clearly defined, lacks explanatory power (e.g., in a school, what determines who, among all the students, imitates a suicide?).

A SPECULATION REGARDING POINT-CLUSTERED SUICIDES

I suggest that the concepts of imitation or contagion may not be needed to explain point-clustered suicides. Rather, four sets of findings, taken together, indicate an alternative view. First, severe negative life events are risk factors for suicidality (and the suicidal behavior of a friend or peer qualifies as one of a large array of severe negative life events). Second, good social support (e.g., healthy family functioning) buffers people against developing suicidal symptoms. Third, there exists an array of person-based risk factors for suicidality (e.g., personality disorder or other psychiatric disorder). Fourth, people form relationships *assortatively*—that is, people who possess similar qualities or problems, including suicide risk factors, may be more likely to form relationships with one another. Therefore, it is possible that people who are vulnerable to suicide may cluster well before the occurrence of any overt suicidal stimulus (i.e., suicide point clusters may be, in a sense, prearranged), and when they experience severe negative events, including but not limited to the suicidal behavior of one member of the cluster, all members of the cluster are at increased risk for suicidality (a risk that may be offset by good social support).

Consider, for example, the point cluster described by Haw (1994), in which victims were assortatively related on the basis of, at least in part, shared suicide risk factors (e.g., the chronic mental illness that brought them all to the same psychiatric unit). Vulnerable people were brought together (through contact with the agency), were exposed to severe stress (potential for dissolution of the agency; lack of access to important caregivers; for some, suicides of peers), and may not have been well buffered by good social support (the chronically mentally ill often have low social support; a main source of support may have been the agency, which was threatened).

Or consider the example of point clusters within high schools. In this case, the assortative relationships—the prearrangement of clusters—may occur in one or both of two ways. First, because they have mutual interests, compatible qualities, or similar problems (including vulnerability to and experience of psychopathology), vulnerable adolescents may gravitate toward one another. A point cluster reported by Robbins and Conroy (1983) demonstrates this possibility. In this cluster, two adolescent suicides were followed by five attempts (all five teenagers were subsequently admitted to the hospital) and one hospital admission for having suicidal thoughts. Of the six hospitalized teens, all had regularly socialized with each other, and all visited each other during their hospitalizations. Second, having social contact (for whatever reason, assortative or not) with an adolescent who completes or attempts suicide appears to lower the threshold at which a teen becomes suicidal (Brent et al., 1989). The mere occurrence, then, of suicidality in one adolescent may automatically arrange a potential cluster.

Although the empirical facts on point clusters are limited, they appear to be consistent with my speculation that severe negative life events, person-based risk, social contiguity (perhaps as a function of assortative relationships), and lack of buffering by social support, taken together, explain the phenomenon. In an effort to provide further empirical support for this view, I conducted an analogue study among college roommates. College roommates provide an interesting "natural laboratory" for studying issues involving assortative relationships, because in many large universities, a sizable proportion of roommates are randomly assigned to each other (by the university housing agency) and the rest assortatively choose to room with each other. I predicted that suicidality levels would be more similar among roommates who chose to room together than among those randomly paired together. Moreover, I predicted that suicidality levels would be particularly consonant among pairs who both chose one another and, by their own reports, had been experiencing negative life events that affect-

ed both of them. Results supported the view that prearranged point clusters (in this case, arranged by people choosing to live together) would share suicide-related features (in this case, symptoms), and that clustered suicidality was particularly likely in those prearranged clusters that had been affected by negative life events. It must be emphasized that this study was an analogue study, and that, in general, students' levels of suicidality were quite low, making the generalization to attempted or completed suicide questionable. The results, however, converge with those from reports on actual point clusters to make the explanation offered here, at the least, a candidate for further study.

ADDRESSING POTENTIAL CRITICISMS OF THIS EXPLANATION

Why Don't Point Clusters Happen All the Time?

According to my speculation about why point clusters develop, at least two concepts are key to understanding why they are relatively rare. First, my explanation involves the joint operation of several phenomena that themselves are infrequent in occurrence. Severe negative events, high person-based risk, suicidality itself, and low social support—all jointly operating ingredients of my explanation—are relatively rare; their confluence is even more so. Second, even given the confluence of these factors, attempted or completed suicides represent an extreme and severe psychopathology, the threshold for which is presumably quite high. Thus, even when life events are severely negative, person-based risk is high, and social support is low, the threshold may not be reached.

Why Don't Point Clusters Occur Within Families?

Because suicidality and suicide risk run in families, because the suicide of a family member is arguably the most severe of negative events, and because family members are socially contiguous, families would appear to be likely sources for point-clustered suicides. Apparently, however, they are not. This may be because of the protective action of social support. Social support is, in general, pervasive (indeed, the need to belong has been proposed as a fundamental human motive; Baumeister & Leary, 1995), and it is intensified for families in mourning. Increased social support thus may offset families' risk for additional suicides among family members.

CONCLUSIONS

The evidence for mass clusters is weak or equivocal, whereas point clusters appear to occur. But clustering does not contagion make. By implication at least, suicide clusters often have been explained as analogous to miniepidemics of contagious illness. I have suggested, however, that a more apt analogy is disasters or industrial accidents, in which simultaneous exposure to some external, pernicious agent (e.g., radiation) is the mechanism of action, a mechanism that is particularly harmful to already vulnerable people. Point-clustered suicides may occur similarly: Contiguous people, if exposed to noxious stimuli (e.g., a severe negative life event, such as the suicide of a peer), and if vulnerable but unprotected (by social support), may simultaneously develop suicidal symptoms.

Recommended Reading

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Note

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